

San José of *Diaspis pyricola*, styled the "Italian pear scale," which proves from specimens on French prune sent at our request by Mr. E. M. Ehrhorn, January 24, 1900, and exhibited herewith, to be the species under discussion.

When in California last Fall (1899) Dr. Howard noted infestation by what proves to be this scale insect on a pear tree in the city of San José. Writing under date of January 24, 1900, Mr. Ehrhorn says this scale insect has been in San José since 1889, and is spreading a little though being vigorously fought. He says it has a habit of getting under moss on the trees, which makes it more difficult to control.

This *Diaspis* is still another illustration of a mischievous scale insect which has come to us from Europe on imported stock. The published records show it to occur very commonly on pear in Germany, France, Italy and Portugal; and in Italy also on "apple, peach, etc." In the Department collection, it is represented from Germany and France on pear, and from Italy on apple.

A New *Eriococcus*, With Remarks on Other Species.

By T. D. A. COCKERELL, N. M. Agr. Exp. Sta.

Eriococcus quercus toumeyi, subsp. nov.

♀.—Sac quite ordinary, closely felted, white, about 4 mm. long. Eggs pale green; the insect hibernates in the egg stage. ♀. On boiling in liquor potassæ, turns the liquid pale pink. Antennæ 7-jointed, joints measuring in micromillimeters: (1.) ? (2.) 33, (3.) 51, (4.) 36, (5.) 24, (6.) 18, (7.) 30. Formula 342756 agreeing with that of *E. quercus* and *dubius*. Femur with trochanter 228, tibia 150, tarsus 120, claw, 33, width of femur 69 u. Dermal spines very large, the largest 65 u long.

Hab.—On twigs of *Prosopis velutina*, close to the University of Tucson, Arizona, collected by Prof. Tonmey and the present writer, Nov. 1899. It is quite scarce, being greatly reduced by a dipterous parasite, doubtless *Leucopis*.

The North American species of *Eriococcus* (if we include an unpublished one found by Mr. Parrott on grass in Kansas) are 14 in number, two of them (*aravcariae* and *coccineus*) being introductions from abroad. Of these *E. neglectus* is known by its waxy sac; *E. arenosus* by its sandy sac, although individu-

als may yet be found without this peculiarity; and *E. azaleæ* by the sac being covered with protruding filaments, and also by the reddish-purple eggs, the usual color of the eggs in the genus being pale yellow. The remaining species have closely-felted sacs, very much alike, so that they can hardly be determined from external characters.

On microscopical examination *E. quercus* stands out prominently from all the others by reason of its very long tibia, which is conspicuously longer than the tarsus. The insect named *toumey*i agrees herein with *quercus*, but differs in its longer tarsus, and the generally smaller antennæ. The measurements of the antennal and segments of *toumey*i fall completely within the range of variation of *tinsley*i, but the legs and spines are not at all as in that species.

The normal number of antennal joints in North American *Eriococcus* is seven, though *neglectus* and *palmeri* have only six, while *borealis* varies from 7 to 8. In *E. aravcaria*, *adenostomæ* and *dubius* the tibia and tarsus are subequal in length; but in *gillettei*, *tinsleyi*, *azaleæ*, *coccineus* and *borealis* the tarsus is distinctly longer than the tibia. These characters of the legs and antennæ are useful but not always conclusive, owing sometimes to their variability and sometimes to the fact that they are virtually identical in really different species, as *tinsleyi* and *larrea*, which differ greatly in the spines.

From South America only one *Eriococcus* has been received, viz. *E. brasiliensis*, Ckll. ined., found by Messrs. Hempel and Von Ihering at Yprianga, Brazil, on *Baccharis*. It has 7-jointed antennæ; formula 37 (24) 56 to 3 (72) (45) 6; ♀ sacs cream color, 2½-3 mm. long, closely felted.

Kuhlitz, in the *Monatsschrift für Kakteenkunde*, Jahrg., viii, p. 166 (1808), has described a *Rhizococcus multispinosus*, found on *Opuntia vestita*, a South American species of cactus. This creature is manifestly an *Eriococcus*, and its name is unfortunately similar to that of *E. multispinus*, Maskell. However, by its reddish color, 7-jointed antennæ and proportion of joints, and habitat on cacti, it resembles *E. coccineus*, of which it is quite possibly a synonym.

NOTE.—I will take this opportunity to raise the question

whether *Pulvinaria phaiæ*, Lull, ENT. NEWS, Oct., 1899, p. 237, is not identical with *P. brassiæ*, Ckll., *Can. Ent.*, 1895, p. 135, found in the orchid *Brassia*. The slight difference apparent in the antennæ is hardly likely to be of specific value. It is further possible, to say the least, that both insects may be identical with *P. floccifera*, Westwood, as interpreted by Green in *Ent. Mo. Mag.*, 1897, p. 73.

A New Species of Myrmeleon from Texas.

By NATHAN BANKS.

Recently Mr. McClendon sent me for determination some Myrmeleonidæ from Texas, among which is a new species of the genus *Myrmeleon*, as restricted. Doubtless there are several species in this genus yet to be separated out from the common *M. rusticum* Hag. This form, however, is very distinct by several points of coloration, so that there is no chance of its being confused with *M. rusticum*, which is in the same region.

Myrmeleon texanum n. sp.

Head yellowish, with a large, shining black spot in front, reaching from the antennæ to the clypeus, vertex more reddish, unspotted; pronotum pale yellowish, with a broad central brown stripe, broadest behind, and in front of the furrow much narrowed and divided by a pale line; meso- and metathorax dull yellow-brown, not distinctly marked, but with a broad yellow stripe each side through the bases of the wings; thorax clothed with white hair; abdomen dark brown; legs pale, somewhat reddish, without dark stripes, with black bristles and reddish spurs. Wings hyaline, the extreme bases somewhat flavescent; venation yellowish, without dark interruptions; above eight cross-veins before the origin of the radial sector, two cross-veins connecting the cubital fork to the anal vein; pterostigma rather whitish, not distinct; tips of wings acute, and the hind margin near tip is slightly sinuate.

Length 30 mm.; expanse 54 mm.

Galveston, Texas, June, 1900. Readily known from the other species by its wholly pale legs, pale pronotum, markings of head, and pale, uninterrupted venation of wings.

Muggins—"Animal training has gotten down to a pretty fine point when we hear of educated fleas." Buggins—"Why, years ago, when I was a boy, we used to have spelling bees."